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AUTHORITY

Adjutant General's Office [Army] ltr dtd 29 Apr 1980

DEPARTMENT OF THE ARMY
OFFICE OF THE ADJUTANT GENERAL
WASHINGTON, D.C. 20310

IN REPLY REFER TO
AGAM-P (M) (22 Apr 68) FOR OT RD 681009

25 April 1968

SUBJECT: Operational Report - Lessons Learned, Headquarters, 262d Quartermaster Battalion (Petrl), Period Ending 31 January 1968 (U)

SEE DISTRIBUTION

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2. Information contained in this report is provided to insure appropriate benefits in the future from lessons learned during current operations and may be adapted for use in developing training material.

BY ORDER OF THE SECRETARY OF THE ARMY:

Kenneth G. Wickham

KENNETH G. WICKHAM
Major General, USA
The Adjutant General

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as

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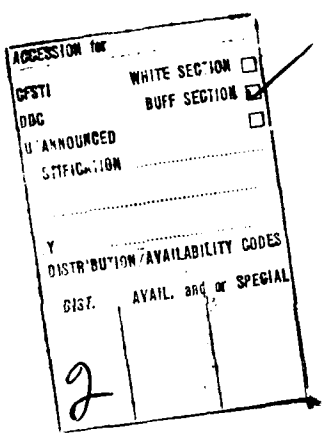

DEPARTMENT OF THE ARMY
HEADQUARTERS, 262d QUARTERMASTER BATTALION (PETROLEUM)
APO 96312

3

AVCA CR-D-POLB-262-CO 3 February 1968

SUBJECT: UIC WDOHAA Operational Report for Quarterly Period Ending 31 January 1968 (RCS CS FOR-65) (U)

THRU: Commanding Officer, US Army Depot, Cam Ranh Bay
ATTN: SIPT, APO 96312

Commanding Officer, USASUPCOM-CRB
ATTN: AVCA CR-CO-P, APO 96312

Commanding General, 1st Logistical Command
ATTN: AVCA CO-O, APO 96384

Commanding General, US Army Vietnam
ATTN: AVHGC-DST, APO 96375

Commanding General, US Army Pacific
ATTN: GPOP-OT, APO 96558

TO: Assistant Chief of Staff for Force Development
Department of the Army, Washington, D.C. 20310

The Operational Report of this headquarters for the quarterly period ending 31 January 1968 is forwarded in accordance with Army Regulation 1-19 and USARV Regulation 870-2.

TEL: CRB 4313

Billy R. Spinks
BILLY R. SPINKS
LTC, QMC
Commanding

FOR OT RD
681009

OPERATIONAL REPORT - LESSONS LEARNED

SECTION I: SIGNIFICANT ORGANIZATIONAL ACTIVITIES

a. The 262d Quartermaster Battalion (Petroleum) submits this report for the second full quarter of operations in the Republic of Vietnam. The battalion has been making steady progress and improvements in all areas during this period.

Safety: The Battalion Safety Program has been continued with increased emphasis on fire and driving safety.

MONTH	NUMBER OF VEHICLES	MILES DRIVEN	NO. OF ACCIDENTS
November	94	104,512	0
December	172	174,921	2
January	172	163,132	4

One officer and four enlisted personnel were sent TDY for one week to Phan Thiet to provide technical on-the-job-training to FSA personnel in operating newly constructed storage tanks and pipelines and in rigging a 2100 foot floating sealine. Due to the assistance rendered by these personnel, a total of 6,500 barrels of JP-4 was discharged to shore by the Y-101 on 10 November 1967. The installation and operation of a floating hose line was perhaps the most important result of the visit. Also gaging, sampling techniques, safety and general tank farm procedures were taught.

The battalion was given the mission of establishing and operating Class III Supply Points at Bao Loc and Gia Nghia in November. One officer and five enlisted personnel were sent to Bao Loc while one senior NCO and three enlisted personnel went to Gia Nghia. A total of 16.7 short tons of POL equipment was rapidly moved to these locations. Over 470,500 gallons of bulk product was issued by personnel at Bao Loc during December in support of 101st AB Division combat operations.

The Lear-Seigler Inc. Spectrometric Oil Analysis Laboratory is now fully operational in Cam Ranh Bay under the sponsorship of the 262d QM Bn (Petrl). The lab is now located in mobile vans and operating under contract #DA 232044 AMC 08023 (T) Delivery Order #11. Construction has begun on a permanent building to house the laboratory. Currently, the ASOAP lab is averaging 5,000 samples per week.

On 19 December 1967, the 360th Transportation Company and the POL Platoon of the 670th Transportation Company were attached to the 262d QM Bn (Petrl). This addition significantly expands the long haul bulk POL movement capability of the battalion.

On 15-17 December and 26-28 December 1967, a two man POL team was dipatched to Ban Don, located near the Cambodian border, to provide direct support to 5th Special Forces Group in an operation conducted in that area. The team carried sufficient POL equipment to operate two CH-47 refueling points.

In January, the battalion was directed by 1st Logistical Command to establish a Class III supply point at Cheo Reo, which is located in the Qui Nhon Support Command Area. Personnel and equipment have been moved and operations started on 26 January 1968.

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On 26 January 1968, the 525th QM Co (Petrl Depot) completed movement into new billets in the permanent Cantonment Area at Cam Ranh Bay. The new billets are a vast improvement over the tents which the company had previously been living in and will be a significant factor in maintaining the company's high morale.

Troop facilities were also expanded by HHC, 262d QM Bn (Petrl). This company has completed construction of a new day room and arms room. The company will also take over a few of the buildings vacated by the 525th QM Co (PD), thus, greatly improving the living conditions for the men of Headquarters Company.

PIO Program: The battalion began publication of a newspaper in January. The paper contained information about the battalion's activities and their importance, personnel news items such as promotions and awards, and other news. It is planned that the newspaper will be published twice monthly. In addition to the publication of the newspaper, the battalion has continued to submit feature articles to higher headquarters for publication. Home town news releases are being submitted as shown below:

MONTH	NUMBER OF RELEASES
November	54
December	51
January	52

The battalion infused 23 people in January to break up the rotational hump in April and May. The program was controlled by US Army Depot and only non-POL MOS's were infused. A second infusion program for non-POL MOS's is under way now, again controlled by US Army Depot.

b. PROBLEMS AND SOLUTIONS

ACCOUNTABILITY OF BULK POL TAKEN ON CONVOY

A problem existed in the accountability of bulk POL delivered to Phan Rang, Dalat, Ban Me Thuot, and other Class III supply points by convoy. The 262d QM Bn maintains accountability of the fuel as it is issued from the fillstand to the transportation company's tankers by the use of DA Form 1348-1; however, the battalion did not receive any documentation showing where the fuel had been delivered, how much was delivered, or when it was delivered. The only information received was a daily report showing receipts and issues of bulk POL at the Class III supply points. The Motor Movements Officer coordinated with the Director of Petroleum, US Army Support Command, Cam Ranh Bay, and the Operations Officer, 262d QM Bn (Petrl), to determine the number of tankers going on a convoy, and the product that they would be carrying. When this information was obtained, TCMD's were prepared for the product, and taken to the fillstand. When the tanker arrived at the fillstand, the driver signed the TCMD for the fuel. Upon arrival at destination, the driver has the consignee at the POL site sign the TCMD acknowledging receipt of the product. The customer receives a copy of the TCMD for his records, and the remaining copies are returned. The documentation section receives four copies of the TCMD and the transportation unit retains one copy.

REFINEMENT OF FIRE FIGHTING EQUIPMENT AND PROCEDURES

Lack of fire protection in the tank farms and other POL handling areas has been a previous problem, but the battalions fire fighting capability has steadly

improved. The organic fire fighting capability was increased with the arrival of an additional JET-X system. This enabled the battalion to preposition a JET-X system in each tank farm. A third JET-X system has been ordered and is enroute. Although preliminary plans for the use of this system are incomplete, there is a possibility of installing this system at the new jetty. One complete JET-X system has been truck mounted to give a mobile capability; thereby, providing protection in case of fire to all POL handling areas in Cam Ranh Bay. As this battalion is not authorized fire fighting MOS's, all personnel in the tank farms are in a continous training program. Formal training and unannounced fire drills are held frequently. The Fire Chief from the Cam Ranh Bay Air Base has witnessed some of our drills and has assisted us with suggestions on quick deployment of fire hoses.

c. The 262d Quartermaster Battalion (Petrl) provides command, staff planning, coordination and technical supervision of operations, training and administration for one Headquarters and Headquarters Company, one Petroleum Depot Company, one Petroleum Operating Company, one Medium Truck (Petroleum) Company, and three Petroleum Detachments located at Dalat, Ban Me Thuot, Bao Loc, Gia Nghia, and Cheo Reo. In addition, it provides: (a) Technical assistance to units and organizations located in the Cam Ranh Bay Support Command Area; (b) Quality surveillance of petroleum products to the entire Cam Ranh Bay Support Command Area through the base petroleum laboratory of the 524th Petroleum Operating Company located at Cam Ranh Bay; (c) Quality surveillance of petroleum products to Navy and Marine Aviation Groups operating in the Chu Lai area through the mobile lab organic to Headquarters and Headquarters Company, but under the operation of the 80th GS Group.

(1) 525th Quartermaster Company (Petroleum Depot)

(a) Operates one Class III Package Storage Area and a drum storage area at Cam Ranh Bay encompassing approximately 100,000 square feet with an average O/H tonnage of 11,700 S/T's.

(b) Operates the black oil distribution point located at the Vinnell ship mooring site, Cam Ranh Bay, in support of requirements from Cam Ranh Bay. Tuy Hoa, Nha Trang and Phan Rang with a daily issue of approximately 9,000 gallons when black oil is available.

(c) Several elements of this company are located in other areas of Vietnam performing their assigned missions. Although the company does not retain operational control, they are still responsible for administrative and limited logistical support. The company's organic base laboratory is assigned to the 64th Quartermaster Battalion to perform quality surveillance for the Saigon Support Command Area. Otcr platoons of the company are located in Phan Rang, Vung Roe, (Tuy Hoa), and Qui Nhon. They operate and maintain three pipelines of a distance of 6 miles, 16 miles and 7½ miles respectively. They operate and maintain three pump stations and assist in the operation of three tanker discharge facilities.

(d) Operates and maintains the 500 gallon collapsible drum loading and storage area. In addition, maintains a basic load of 500 gallon drums at the storage area located in the Cam Ranh Bay Air Force Base. This facility will receive, fill and ship approximately 500 drums per month.

(e) Operates a ten point truck, drum and can bulk refill stand located in Cam Ranh Bay. This fillstand supports the bulk fuel requirements for all of Cam Ranh Bay, Phan Rang, and Dong Ba Thin. It issues all four products (JP-4, Avgas, Mogas, and diesel) to all tanker trucks, 55 gallon drums and 5 gallon cans. The average daily issued of all products is approximately 140,000 gallons.

(2) 524th Quartermaster Company (Petroleum Operating):

(a) Operates and maintains the two major tank farms at Cam Ranh Bay. The two tank farms have a total storage capacity of 376,000 barrels of JP-4, Avgas, Mogas, and Diesel fuel.

(b) Operates and maintains two mainline pumping stations for bulk fuel. Pump station number one consists of eight two stage, 6" pumps that move product from tanker ship to the tank farms. Pump station number two consists of six two stage 6" pumps that move the product from Tank Farm #1 to the Air Force Base tank farms.

(c) Operates and maintains two 6" pipelines of approximately 7 miles each from the petroleum jetty to the tank farms and to the Air Force Base tank farm. In addition, the unit maintains 40 miles of intra-tank farm pipelines.

(d) Operates the petroleum deep water terminal for tanker discharge which can accomodate T-5 tankers.

(e) Supervises and controls ship to ship and ship to shore transfers in the Cam Ranh Bay Area.

(f) Provides daily refueling support for Cam Ranh Bay Army Airstrip by use of organic JP-4 and Avgas tanker trucks.

(3) 237th Quartermaster Detachment (Petroleum)(Augmented)

(a) The 237th Quartermaster Detachment (Petroleum)(Augmented) is located at Dalat. It receives, stores and issues bulk petroleum products from collapsible tanks with a total storage capacity of 110,000 gallons. They receive bulk product by road convoy and air shipment.

(b) Operates and maintains Class III package and drum stocks of approximately 20 Short Tons.

(c) Operates a small bulk refill area for refueling vehicles, drums and cans to support all local units.

(d) Operates a miniport for the refueling of helicopter and small aircraft. Also, operates a 1,200 gallon tanker for additional refueling of small aircraft and refueling larger aircraft (C-123, C-130) upon request.

(e) Supports the Dalat area with petroleum technical assistance and advice.

(4) 255th Quartermaster Detachment (Petroleum)(Augmented)

(a) The 255th Quartermaster Detachment (Petroleum)(Augmented) is located at Ban Me Thuot and Cheo Reo.

(b) Receives, stores and issues bulk petroleum products utilizing collapsible tanks with appropriate hoses, pumps and fittings.

(c) Receives, stores and issues packaged Class III products to include liquified petroleum gas for the support of all units in the Ban Me Thuot and Cheo Reo areas.

(d) Directly supports local aviation companies (155th Aviation Co and 183d Aviation Co) by resupplying their miniports and providing petroleum technical assistance and advice.

(5) 253d Quartermaster Detachment (Petroleum)(Augmented)

(a) The 253d Quartermaster Detachment (Petroleum)(Augmented) is located in Bao Loc and Gia Nghia.

(b) Receives, stores and issues bulk petroleum products utilizing collapsible tanks with appropriate hoses, pumps and fittings.

(c) Provides limited package Class III support to local units and combat units operating in the area.

(6) 360th Transportation Company (Medium Truck)(Petroleum)

(a) The 360th Transportation Company (Medium Truck)(Petroleum) is located in Cam Ranh Bay.

(b) Provides line haul movement, including command and control elements of bulk petroleum products to Phan Rang, Dalat, and other locations within the Cam Ranh Bay United States Army Support Command Area, as directed.

(c) Provides march elements of bulk petroleum to Ban Me Thuot, Dalat, Bao Loc, Phan Thiet and other locations as directed.

(d) Provides daily local delivery capability for up to 100,000 gallons of bulk petroleum products to Cam Ranh Bay Area customers to include Dong Ba Thin, utilizing organic and attached tank trailers.

(e) Provides organic personnel and equipment for all other missions as directed.

(7) POL Platoon of 670th Transportation Company (Medium Truck)

(a) The POL Platoon of 670th Transportation Company (Medium Truck) is located in Cam Ranh Bay.

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(b) The POL Platoon of 670th Trans Co is attached to the 360th Trans Co and is utilized in support of the 360th's missions.

(8) Headquarters and Headquarters Company, 262d Quartermaster Battalion (Petroleum).

(a) Headquarters and Headquarters Company, 262d Quartermaster Battalion (Petroleum) is located in Cam Ranh Bay.

(b) Provides command, administrative, training and supply support to all personnel assigned to the Battalion Headquarters elements.

(c) Provides all logistical support for the operation of the Battalion Headquarters.

(d) Provides for the transportation requirements of the Battalion Headquarters and maintenance of all organic vehicles.

(e) Provides supervise and maintain the battalion communications system.

(f) Provides organic personnel and equipment for all other missions as directed.

SECTION II: COMMANDER'S OBSERVATIONS AND RECOMMENDATIONS

PART I: OBSERVATIONS

1. PERSONNEL

a. Item: Attachments of Units and Personnel of the Battalion to Other Commands

Discussion: This battalion has personnel attached to units in Long Binh, Qui Nhon, Chu Lai, and Da Nang, and was directed to have their personnel records accompany them, but the responsibility for preparation of morning report entries remained with the battalion. Morning report entries concerning leave, R&R, promotion, demotion, and even reassignment are often made long after the event because orders published at the distant location are rarely forwarded to the parent unit. The implementation, on 1 February 1968, of the PERMACAP system in the USASUPCOM-CRB Personnel Service Center could serve to confuse this situation further. Units desiring to make a morning report entry on a member of their command must request orders from the Cam Ranh Bay Personnel Service Center. If the member is attached elsewhere with his records, the action may never be posted in the 201 file. Also, the problem of not receiving copies of orders still exists if the request for orders on the local Personnel Service Center is initiated by the unit to which a person is attached.

Observations: That attachment of personnel for all purposes, to include morning reports, should be used for indefinite periods which are expected to exceed 3 months in duration. More accurate strength accounting would result from this procedure, as well as, presenting higher commands a clear picture of strength in each area, and better identification of over and understrength units/command.

b. Item: Rotation Hump of POL MOS's

Discussion: The DEROS dates of personnel with MOS 76W continues to present a problem. Ninety-five percent of the 76W personnel in one company of this battalion rotate in April 1968. Infusion of these persons is anticipated under provisions of the USARV Controlled Infusion Program. Rosters were submitted at the direction of 1st Logistical Command on 2 January 1968. We have not been advised of the status of this program since that date.

Observations: That infusion of all possible 76W personnel should be accomplished at the earliest possible date. Newly arrived units should be scrutinized upon arrival so that infusion may be started immediately, if required. MOS's peculiar to only a few units should receive special attention at the earliest possible date.

LOGISTICS: None

SECTION II: TRAINING AND OPERATIONS

a. Item: MOS Training of Replacement Personnel

Discussion: There is no Advanced Individual Training in MOS 64B20, Heavy Vehicle Driver. Most replacement drivers are qualified Light Vehicle Drivers (MOS 64A10); and therefore, must be trained to operate the larger vehicles. Every effort is made to see that these people receive proper instruction on operating and maintaining their equipment.

Observations: On-the-job training and formal training is required to train new drivers. Heavy vehicle driver skills are mandatory in convoy operations and should be taught prior to arrival in a combat zone.

b. Item: Replacement Training

Discussion: Present training requirements duplicate much of the training personnel receive in CONUS prior to coming to Vietnam.

Observations: Valuable time is being wasted by requiring training which has previously been given to troops prior to departure from CONUS. Since they have already had the training, interest is low and the value of such training is questionable.

INTELLIGENCE: None

OPERATIONS:

a. Item: The Usage of Closed Sea Land Trailers Requires More Physical Work and Time Than Does Open Bed or Stake and Platform Trailers in Unloading

Discussion: This unit recently has been receiving drum and packaged petroleum products in closed Sea Land semi-trailers. Due to the metal top on the trailers, the drums must be turned on their side, rolled off the rear of the trailers onto the ground then picked up by material handling equipment. Open flat bed trailers can be off-loaded six (6) drums at a time utilizing the 20 ton crane, since this type of trailer has no top on it. To off-load the closed Sea Land trailer, it takes about twice as much time and about three times the number of personnel.

Observations: By utilizing open bed stake and platform trailers for the shipment of drum and packaged petroleum products instead of closed Sea Land trailers, a great savings in man hours spent off-loading can be realized.

b. Item: Shifting of Pipelines

Discussion: When the six inch coupled pipeline has been uncoupled for repairs in the area of a hill or curve, the pipeline has a tendency to shift and is difficult to recouple.

Observations: It has been found that if the pipeline is anchored to trees or vehicles on both sides of the point where the pipe is to be uncoupled, shifting

of the pipeline will be held to a minimum. If a shift still occurs, a vehicle can be attached to one of the uncoupled sections and utilized to pull it back in line. Another effective method is to tie a chain to the couplings on either side and a chain binder (boomer) is then utilized to prevent the uncoupled sections from pulling apart.

c. Item: Inadequacy of Composite Samples

Discussion: Military Handbook 200-B outlines procedures for taking composite samples from seagoing tankers. This type of sampling is supposed to show, in test results, the status of all the product. Therefore, some of the compartments on arriving tankers have not been previously tested.

Observations: Experience has proven that a total ship composite, such as the commercial laboratories run, can fail to indicate "Not Suitable for Use" product in the compartments that are not sampled. This becomes especially critical when large quantities of product are transferred to a smaller tanker or small shore facilities. All, or a large portion of the product received, could have come from this "Not Suitable for Use" compartment. Tests should be run on each separate compartment on board a tanker prior to the tanker discharging a product.

d. Item: Substitution of an Electrolyte Sulfuric Acid Solution for Concentrated Sulfuric Acid in Laboratory Tests

Discussion: Sulfuric acid is utilized in running laboratory tests on the anti-icing additives in JP-4. The laboratory normally utilizes concentrated sulfuric acid, which is then diluted to a 37% concentration. Existing stocks of concentrated sulfuric acid had dwindled to a low level and resupply was slow in arriving. The lack of sulfuric acid would prevent the laboratory from conducting the important anti-icing additive tests on JP-4.

Observations: A check of Supply Catalogue C6 800 IL showed that a sulfuric acid solution with a concentration of 36.5-37.5% was stocked for use as an electrolyte in batteries. Some of this diluted sulfuric acid was obtained and found to be suitable for performing the test on JP-4. Advantages to utilizing the diluted sulfuric acid are that it eliminates the potentially dangerous step of diluting concentrated sulfuric acid and is readily available as a substitute for concentrated sulfuric acid.

e. Item: Suitable Sample Containers

Discussion: Because of the high humidity and temperature in the Republic of Vietnam, metal sample cans rust very quickly. Even new cans from the supply system arrived containing large amounts of rust. Cans containing rust cannot be used to sample fuels or lubricants because the source of the rust cannot be determined during laboratory analysis. Attempts to clean the rust from the cans proved unsuccessful. The only alternative was to find a source of non-rusting sample containers.

Observations: Several types of containers were tested. Glass containers having rubber seals such as Mason Fruit Jars were not suitable since the petroleum

products attacked and dissolved the rubber gasket. The following are examples of sample containers found serviceable as a field expedient:

(1) Sterile water, glucose, or physiological saline bottles available from dispensaries can be used. The bottles must be used with special considerations, e.g., protection from breakage. If leaded fuels are sampled, the bottles must be protected from direct sunlight since tetraethyl lead when exposed to sunlight forms an insoluable lead salt precipitate.

(2) Battery acid containers also make suitable sample containers. The same considerations for shielding products from direct sunlight must be observed. The acid containers have the advantage that they can be easily carried empty which makes them useful for liaison trips. The acid containers filled with petroleum products must be carefully handled to avoid puncture.

(3) One quart polyethlene sample bottles, FSN 8125-889-3548.

f. Item: Non-availability of Reducers for POL Equipment Effects the Ability of the Unit to Expeditiously Accomplish Assigned Missions

Discussion: This unit has set up 2 helicopter refueling systems in the past quarter. The system consists of collapsible POL storage tanks, a 4" pipe manifold system and a 1½" inch hose and nozzle. In order to reduce from the four inch pipe to the 1½ inch hose, a series of reducers were needed. The unit experienced great difficulty in securing all the needed reducers thru supply channels. In order to circumvent this problem, a 1½ inch hole was drilled and tapped in a 4 inch hose dust cap and then a 1½ inch hose fitting was welded to a small piece of 1½ inch pipe. The pipe was threaded at the other end and was screwed into the 4 inch dust cap. This provided a 4 inch to 1½ inch reducer eliminating the need for the 4 to 3 inch reducer, 3 to 2 inch reducer and the 2 to 1½ inch reducer (see Inclosure 1).

Observations: If a 4 to 1½ inch reducer was readily available through supply channels, the establishment of helicopter refueling systems would be greatly simplified.

g. Item: Burying of POL Hoses for Protection Against Shrapnel Leads to Accelerated Rotting and Deterioration of the Hose

Discussion: In order to prevent petroleum hoses from becoming damaged during an attack, this unit has buried the hoses leading from the POL storage tanks to the loading stands. This has resulted in the hoses deteriorating within a couple of months and having to be uncovered, replaced and reburied. To circumvent this problem, the 4 inch hose is being replaced with 4 inch steel tubing.

Observations: If a fuel system supply point is to be utilized for any significant period of time, the 4 inch hose utilized with this system should be replaced with 4 inch steel tubing.

h. Item: Incorporation of 4" Steel Tubing Into Helicopter Refueling Points

Discussion: In order to be able to incorporate 4" steel tubing in a helicopter refueling point, a connection between 4" coupled steel pipe and the 4" hose with Kam Lock fittings (utilized on pumps and filter separators in the system was needed. The Kam Lock to coupled fittings provided with new collapsible tanks was utilized to meet this requirement. However, the demand for this type fitting was much greater than the supply so it was necessary to fabricate a fitting that would do the job. Male and female Kam Lock half couplings with interior threads were available. To connect this Kam Lock half coupling to the 4" coupled tubing, an 18" piece of 4" pipe was threaded on both ends. Two bevels were then cut in the pipe, just to the left and right of the center of the pipe. The pipe was then cut in half, yielding 2 pieces of pipe, each with one threaded end and a beveled groove on the other end. The beveled end could be clamped onto standard 4" tubing utilizing a standard 4" clamp and gasket and the Kam Lock half coupling could be screwed onto the other end. This was found to provide a very satisfactory connection between coupled tubing and Kam Lock hose.

Observations: By utilizing these locally fabricated Kam Lock to victaulic connections, 4" victaulic tubing could be tied into pumps and filter separators equipped with Kam Lock fittings. Also, less expensive, light weight Kam Lock valves could be utilized in the system. The weight of the valves is an important consideration in Vietnam because of the large utilization of air transportation.

i. Item: Utilization of a 350 GPM Pump to Defuel 500 Gallon Collapsible Drums

Discussion: One means of resupplying Class III supply points is to fly in 500 gallon collapsible drums filled with fuel. The common means of de-drumming the fuel into a miniport's larger tanks is to utilize a 50 GPM pump which takes at least 10 minutes per drum. During periods of increased activity, in support of combat operations, it was found this was not fast enough to keep up with the issues from the miniport.

Observations: It was found that by utilizing the reducer mentioned in Item f, a 350 GPM pump could replace the 50 GPM pump to dedrum the 500 gallon collapsible bag. With this system, it is possible to dedrum 2 drums at the same time at a much faster rate.

j. Item: Welded Steel Tanks vs Bolted Steel Tanks

Discussion: In this battalion's Operational Report for quarterly period ending 31 October 1967, the problem of seepage from bolted steel tanks was discussed. Since that time, the seepage problem has continued and attempts to reseal the tanks have not proven successful.

Observations: In an area where a relatively permanent system is being established, welded steel tanks should be programmed to replace existing bolted steel tanks, which are presenting recurring maintenance problems.

k. Item: Large and Slow Moving Vehicles on Convoy

Discussion: During convoy operations on mountainous and muddy roads, the larger vehicles, i.e., lowbed trailers, cranes, front-loaders, etc., have on many

occasions slowed, stopped, or delayed all elements of the convoy due to their restricted maneuverability and cross country capability. When located at the head of the convoy, these large vehicles can delay the entire convoy to an extent that it would present a good target for enemy activity.

Observations: If it is necessary to transport these types of vehicles, they should be placed at the rear of the convoy to preclude delaying the entire convoy due to one vehicle. One of these large vehicles and a security force would be a much less inviting target to the enemy than the entire convoy blocked in behind the large vehicle.

l. Item: Spare Tire and Pioneer Tool Brackets on M52A2

Discussion: These two brackets break quite easily due to the road conditions in Vietnam. To solve this problem we have used armor plating to reinforce both brackets.

Observations: Both the spare tire and pioneer tool brackets last much longer because of the reinforcing accomplished at unit level.

m. Item: Tachometer Adaptor on M52A2

Discussion: The tachometer drive adaptor has a tendency to pull away from the tachometer.

Observations: By removing the pipe plug on the adaptor and replacing it with a lubricated grease fitting, we have solved this problem.

n. Item: Right Fender of M52A2

Discussion: The right fender on the M52A2, 5 ton tractor, is a constant problem because of the weight of the air cleaner and the unimproved condition of the roads. By attaching a chain from the exhaust pipe stack to the fender and bolting a piece of steel to the fender and the running board, we were able to reduce the fender problem.

Observations: Although the right fenders are much better than before the modification, they continue to require close attention.

o. Item: Battery Box on M52A2

Discussion: The road conditions in Vietnam cause the wing nuts, which hold the battery box secure, to work loose. We alleviated this problem by placing a length of chain through the battery box pull handles and around the board support braces.

Observations: This method of securing the battery box has been very effective.

p. Item: Driver Maintenance

Discussion: Inorder to curtail the long working hours of drivers, a first echelon night crew has been established. This crew performs all first echelon

maintenance required as listed by the driver on his DA Form 2404. This system enables the drivers to get their proper rest.

Observations: This system has worked well and is a key element in providing alert safe drivers for daily movements.

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PART III: RECOMMENDATIONS

PERSONNEL

1. That attachment for all purposes to include morning reports be utilized when personnel are going to be away from their parent organization for indefinite periods of time which are expected to exceed three months.

2. That the 1st Logistical Command immediately implement the infusion program for POL MOS's based upon the A and B rosters submitted by this headquarters on 2 January 1968.

OPERATIONS

1. That only open flat bed or stake and platform type trailers be utilized for the shipment of drummed stocks.

2. That the procedures for composite sampling of seagoing tankers as outlined in Military Handbook 200-B be reviewed. A composite sample should never be relied upon if all of the product represented by the composite is not off-loaded into the same tank.

3. That the sulfuric acid solution commonly used for electrolyte in batteries be utilized when possible for laboratory testing.

4. That a reducer from 4" directly to 1½" be made available in the supply system.

5. That the method for utilizing 4" tubing in lieu of 4" hose be published in appropriate publications.

6. That a fitting that allows for a connection from 4" coupled tubing to 4" Kam Lock or quick coupling be made available. This fitting is necessary to be able to incorporate 4" tubing in a miniport aircraft refueling system.

7. That petroleum manuals and doctrine include information on how a 350 GPM pump can be utilized to dedrum 2 or more 500 gallon collapsible drums at once. This method does a much quicker job than a 50 GPM pump and it can be a critical factor when supporting a combat operation.

8. That welded steel tanks be programmed to replace existing bolted steel tanks in systems that are intended for long term utilization.

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AVCA CR-D-SIPT (3 Feb 68) 1st Ind
SUBJECT: UIC WDOHAA Operational Report for Quarterly Period Ending 31 January 1968 (RCS CSFOR-65)(U)

HEADQUARTERS US ARMY DEPOT CAM RANH BAY, APO 96312 7 February 1968

THRU: Commanding Officer, US Army Support Command, Cam Ranh Bay, ATTN: AVCA CR-GO-O, APO San Francisco 96312
Commanding General, 1st Logistical Command, ATTN: AVCA GO-O, APO San Francisco 96384
Commanding General, US Army Vietnam, ATTN: AVHGC-DST, APO San Francisco 96375
Commander-in-Chief, US Army Pacific, ATTN: CPOP-OT, APO San Francisco 96588

TO: Assistant Chief of Staff for Force Development, Department of the Army, Washington, D.C. 20310

1. The inclosed Operational Report submitted by the 262d Quartermaster Battalion (Petrl) adequately reflects the activities of the organization for the period indicated.

2. Reference is being made to recommendation contained in Paragraph 1, Part III, Recommendations, Page 14. Personnel action to be taken in these instances has been published by this and the next higher headquarters.

FOR THE COMMANDER:

STEPHEN R. LEVINE
2LT, AGC
Asst Adjutant

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AVCA CR-GO-O (3 Feb 68) 2nd Ind
SUBJECT: UIC W-DD8-AA Operational Report for Quarterly Period Ending 31 January 1968 (RCS CSFOR-65)

HEADQUARTERS, US ARMY SUPPORT COMMAND, CAM RANH BAY, APO 96312 28 FEB 1968

THRU: Commanding General, 1st Logistical Command, ATTN: AVCA GO-O, APO 96384
Commanding General, US Army Vietnam, ATTN: AVHGC-DST, APO 96375
Commander-in-Chief, US Army Pacific, ATTN: CPOP-OT, APO 96558

TO: Assistant Chief of Staff for Force Development, Department of the Army, Washington, D. C., 20310

The inclosed Operational Report submitted by the 262nd Quartermaster Battalion (Petrl) adequately reflects the activities of the unit for the period indicated with the following exceptions:

a. Reference item d, Section II Operations. The substitute of battery electrolyte, which is a low grade commercial sulfuric acid, is not a suitable substitute for the technical grade of sulfuric acid required for laboratory analysis. Use of commercial grade in lieu of technical grade reagents will affect the accuracy and reliability of fuel tests and should be discontinued.

b. Reference item b, Section II, Part I, Paragraph I.

(1) The rotational hump of enlisted personnel in the 262nd Bn is very serious. A few 76W replacements have been coming in, however the majority of these replacements are "retreads" from some other MOS and will require considerable on the job training before they can fully perform in their newly acquired POL MOS.

(2) Even more critical is the need for infussion of officers, MOS 4960 and POL operations officers MOS 2162. With the exception of one officer, all key officers of the 262nd Bn will rotate in approximately 100 days. While the "rotation hump" may be eliminated during subsequent years, this year the rotational hump will seriously jeopordize mission continuity and affect POL support by the 262nd Bn.

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AVCA CR-GO-O (3 Feb 68) 2nd Ind (Cont'd) 28 FEB 1968
SUBJECT: UIC W-DD8-AA Operational Report for Quarterly Period Ending 31 January 1968 (RCS CSFOR-65)

c. Reference item b, Section 2, Part I, Paragraph 1. The current plan for infusion of the 262nd POL Bn (this plan has been coordinated with Hqs, 1st Log Comd and Hqs, USARV) is to identify 76W personnel for assignment to the three support commands directly from the USARV pipeline. This plan will provide necessary overlap to insure continuity of operations and, if all goes according to schedule, it should eliminate rotational humps during subsequent years.

d. Section I, Paragraph a-10 PIO Program. The publication of a unit newspaper is not authorized unless cleared and approved by the USASUPCOM-CRB IO in accordance with AR 360-81., USARV Reg 360-81, and 1st Log Comd Reg 360-81.

FOR THE COMMANDER:

R. W. STEIN
1LT AGC
ASST A G

TEL: CRB 4120

AVCA GO-O (3 Feb 68) 3rd Ind
SUBJECT: Operational Report for Quarterly Period Ending 31 January 1968 (RCS CSFOR-65) (UIC: WDOHAAA)

DA, Headquarters, 1st Logistical Command, APO 96384 15 MAR 1968

TO: Commanding General, United States Army Vietnam, ATTN: AVHGC-DST, APO 96375

1. The Operational Report - Lessons Learned submitted by Headquarters, 262d Quartermaster Battalion (Petroleum)(UIC: WDOHAAA) for the quarterly period ending 31 January 1968 is forwarded.

2. Pertinent comments follow.

a. Reference Section II, Part I, operations, paragraph a and Part III, operations, paragraph 1: Non concur. Although it may be faster to unload the drums from an S&P trailer at destination, the overall advantages of using Sea land containers must be considered.

(1) Utilizing Sea Land, individual drums require handling at origin and destination. If drums are shipped in the conventional manner, numerous handlings are required, i.e., at origin, the CONUS or PACOM port, the RVN port, and at destination. The overall shipping time within the system would be increased.

(2) Sea Land vans hold approximately twice as many drums as S&P trailers.

b. Reference Section II, Part I operations, paragraph c and Part III, operations, paragraph 2. Composite sampling is designed for speed in cargo clearance for complete discharge to shore tankage. Whenever the situation calls for small quantity transfers to vessels or small shore facilities, deviation from the minimum procedures specified in Military Handbook 200-B should be incorporated into local standard operating procedures.

c. Reference Section II, Part I, operations, paragraph f and Section III, operations, paragraph 4. Adapter recommended is not available through the supply system. OPW Double Adapter is non-standard and manufactured only up to 3 inch size to adapt from 1½ inch. This item may be requisitioned by part number 633-AA, manufacture's code number 81718. Item can then be coupled with reducer, 3 inch coupling half, female to 4 inch coupling half, male, FSN 4730-951-3296, supplied with Fuel System Supply Point Accessary Item Pack, or can also be requisitioned to meet the requirement.

d. Reference Section II, Part I, operations, paragraph h and Section III operations, paragraph 6. Kam Lock to coupled fitting is available through the supply system and should be requisitioned to meet anticipated requirements, thereby eliminating the stated field expedient in future operations.

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AVCA GO-O (3 Feb 68) 3rd Ind
SUBJECT: Operational Report for Quarterly Period Ending 31 January 1968 (RCS CSFOR-65)(U1C: WDOHAAA)

e. Reference Section II, Part I, operations, paragraph j and Part III, operations, paragraph 8. Studies have been made and action has been taken by this Headquarters, USARV, USAECV and USMAC to develop a satisfactory solution for repair of steel bolted tanks and to erect steal welded tanks in areas where feasible.

f. Reference Section II, Part I operations, paragraphs l, m, n, o and p. Concur with observations. The items in paragraphs l thru o and any similar items should be submitted on ELR's so they can be properly evaluated and possibly incorporated as recommended solutions.

g. Reference paragraph b (2), 2d indorsement. The critical need for an officer MOS 4960 and MOS 2162 has been recognized by this headquarters in conjunction with Headquarters, Cam Ranh Bay. In addition in January 1968, it was also recognized, that the majority of the key officers of the 262d Battalion would rotate within the same time frame. However, upon a closer examination ACofS, Personnel, CRB conceded that the replacement of these key personnel could be accomplished from within the 262d Battalion or from within Cam Ranh Bay resources. The requirement for officers in MOS 4960 and 2162 is still recognized as being critical; however efforts are being accomplished to fulfill these needs. It is anticipated that by 31 March this action will be completed.

3. Concur with basic report as modified by indorsements. The report is considered adequate.

FOR THE COMMANDER

TEL: LEN 2684

JERRY R KNUTSON
CPT, AGC
Ass't Adjutant General

Copy Furnished
262nd AM Bn (Petrl)

AVHGC-DST (3 Feb 68) 4th Ind
SUBJECT: UIC WDOHAA Operational Report for Quarterly Period Ending 31 January 1968 (RCS CS FOR-65) (U)

HEADQUARTERS, US ARMY VIETNAM, APO San Francisco 96375 20 MAR 1968

TO: Commander in Chief, United States Army, Pacific, ATTN: GPOP-DT, APO 96558

1. This headquarters has reviewed the Operational Report-Lessons Learned for the quarterly period ending 31 January 1968 from Headquarters, 262d Quartermaster Battalion (Petroleum) (WDOHAA) as indorsed.

2. Concur with report as indorsed. Report is considered adequate.

3. A copy of this indorsement will be furnished to the reporting unit through channels.

FOR THE COMMANDER:

Charles A. Byrd

CHARLES A. BYRD
Major, AGC
Assistant Adjutant General

Copy furnished:
HQ, 1st Log Comd
HQ, 262d QM Bn (Pet)

GPOP-DT (3 Feb 68) 5th Ind
SUBJECT: Operational Report of HQ, 262d QM Bn (Petro) for Period Ending 31 January 1968 (RCS CSFOR-65) (R1)

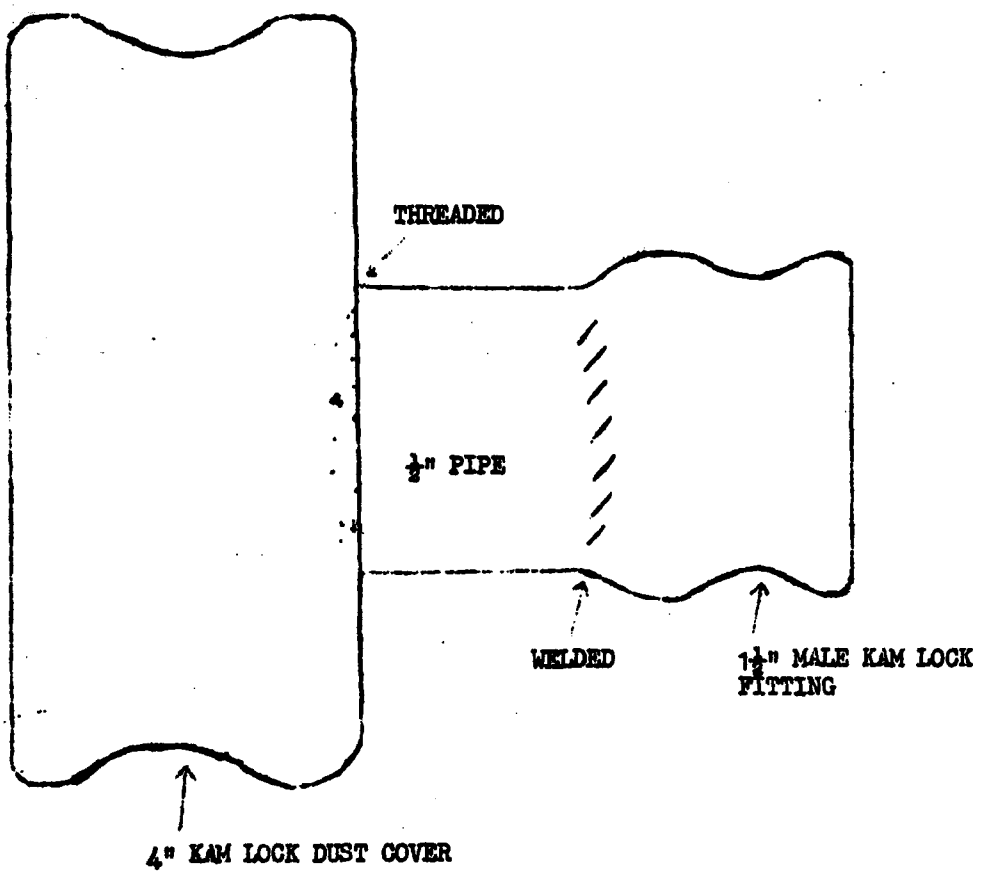
HQ, US Army, Pacific, APO San Francisco 96558 30 MAR 1968

TO: Assistant Chief of Staff for Force Development, Department of the Army, Washington, D. C. 20310

This headquarters has evaluated subject report and forwarding indorsements and concurs in the report as indorsed.

FOR THE COMMANDER IN CHIEF:

C.L. SHORTT
CPT, AGC
Asst AG



NOTE: Either male or female connections may be utilised as required.

Inclosure 1

262d
QM BN (PETRL)
HHC
262d QM BN
(PETRL)
360th
TRANS CO
(MED TRK PETRL)
670th
POL PLATOON
(MED TRK PETRL)
524th
QM CO (PO)
525th
QM CO (PD)
237th
QM DET (PETRL)
(BULK STORAGE
AND ISSUE)
253rd
QM DET (PETRL)
(BULK STORAGE
AND ISSUE)
255th
QM DET (PETRL)
(BULK STORAGE
AND ISSUE)

Inclosure 2

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CO, 262d Quartermaster Battalion

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